

# UNITED STATE DEPARTMENT OF COMMERCE United States Patent and Trademark Offic

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE 09/416,715 10/13/99 LEMBKE 10191/1201 **EXAMINER** 026646 IM52/0525 KENYON & KENYON PAPER NUMBER ART UNIT ONE BROADWAY NEW YORK NY 10004 1773 DATE MAILED: 05/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

## Office Action Summary

Application No. 09/416,715

Applicant(s)

Examiner

Ramsey Zacharia

Art Unit

1773

Lembke et al.



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on \_\_\_\_\_ 2b) X This action is non-final. 2a) This action is FINAL. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle35 C.D. 11, 453 O.G. 213. Disposition of Claims is/are pending in the applica 4) X Claim(s) 1-17 4a) Of the above, claim(s) \_\_\_\_\_\_ is/are withdrawn from considera is/are allowed. 5) Claim(s) \_\_ is/are rejected. 6) 💢 Claim(s) <u>1-17</u> is/are objected to. 7) Claim(s) \_\_\_\_\_ .8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirem **Application Papers** 9) 🔀 The specification is objected to by the Examiner. 10) The drawing(s) filed on \_\_\_\_\_\_ is/are objected to by the Examiner. 11) The proposed drawing correction filed on \_\_\_\_\_\_ is: a pproved b) disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) X Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) ☑ All b) ☐ Some\* c) ☐ None of: 1. X Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. 
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \*See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 18) Interview Summary (PTO-413) Paper No(s). 15) X Notice of References Cited (PTO-892) 19) Notice of Informal Patent Application (PTO-152) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 20) Other: 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_

Art Unit: 1773

#### **DETAILED ACTION**

### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Specification

2. The specification is objected to because of informalities such as the undefined term "fluorormocers", etc.

The applicant is requested to review the application thoroughly and make all appropriate corrections.

# Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 6- 8, 11, 13, 15, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1773

5. The term "fluorormocers" renders claim 7 indefinite because it is not a commonly used term in the art nor is it defined by the specification.

Claim 7 is further rendered indefinite because it contains improper Markush language. See MPEP § 2173.05(h). This may be overcome by deleting the terms: "of the" on line 3, "of the" on line 4, and "of" on line 5.

- 6. Claim 8 is rendered indefinite because it contains improper Markush language. See MPEP § 2173.05(h). This may be overcome by:
  - a. replacing the "and" with --or-- on line 4 of claim 6,
  - b. replacing the "and" with --or-- on line 2 of claim 8,
  - c. replacing the "and" with --or-- on line 3 of claim 11,
  - d. replacing the "and" with --or-- on line 4 of claim 13, and
  - e. replacing the "and" with --or-- on line 2 of claim 15.
- 7. The term "firmly" in claim 17 is a relative term which renders the claim indefinite. The term "firmly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Use of the term "firmly" renders the bond strength of the coating indefinite. For the purpose of examination, coatings that are bonded are taken to be firmly adhered.

Moreover, the limitation that the coating "passes a cross hatch test" in claim 17 renders the claim indefinite because the nature of the cross hatch test is not defined in the claims or

Art Unit: 1773

referred to in the specification. Therefore, the meaning of the limitation is unclear since there are many ways in which cross hatch testing could be performed.

# Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 1, 4-8, 10, 11, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellison et al. (U.S. Patent 5,514,427).

Ellison et al. teach a molded article that may be used in the automobile industry (column 1, lines 16-35). The molded article comprises a surface coating layer adhered to the molded article (Figure 1 and column 3, lines 24-32). In the embodiments of Examples 1-5, the surface layer comprises a fluorinated polymer.

Regarding the limitations of claims 4, 5, and 10, the stability temperature, surface energy, and decomposition temperature are taken to be physical properties of the material. Since Ellison et al. uses a fluorinated polymer for the coating as is done in the instant application, the coating of Ellison et al. is taken to inherently possess the same material properties as that of the instant invention. Furthermore, a coating having a surface energy that meets the limitations of claim 5 should also meet the limitations of claim 6.

Art Unit: 1773

10. Claims 1-3, 6, 11-13, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Gneiss et al. (U.S. Patent 4,944,182).

Gneiss et al. teach an air flow meter comprising a plastic material coating on one surface of the meter to protect the meter from inaccuracies that can arise from long-term soiling over a period of time (column 1, lines 24-38). A suitable material for the plastic coating is one that intrinsically resistant to soiling deposits (column 3, lines 43-45).

11. Claims 1, 4-8, 10, 11, and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugimoto et al. (U.S. patent 4,606,952).

Sugimoto et al. teach an automotive fuel hose and fuel pump diaphragm comprising a laminate of a fluororubber inner layer bonded to an outer layer (column 1, lines 9-13).

Regarding the limitations of claims 4, 5, and 10, the stability temperature, surface energy, and decomposition temperature are taken to be physical properties of the material. Since Sugimoto et al. uses a fluorinated polymer for the coating as is done in the instant application, the coating of Sugimoto et al. is taken to inherently possess the same material properties as that of the instant invention. Furthermore, a coating having a surface energy that meets the limitations of claim 5 should also meet the limitations of claim 6.

Art Unit: 1773

## Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellison et al. (U.S. PATENT 5,514,427).

Ellison et al. teach all the limitations of claim 9, as outlined above, except for illustrating a specific embodiment wherein the thickness of the coating layer meets the limitations of claim 9. However, Ellison et al. do explicitly teach that the thickness of the coating layer may preferably be as thin as 0.5 mil, i.e. about 13  $\mu$ m (column 6, lines 43-45). A thickness of about 13  $\mu$ m is taken to be within about 10  $\mu$ m.

The Examiner takes the position that it would have been obvious to use any of the disclosed thicknesses, including about 13  $\mu$ m, given the reasonable expectation of equivalent results and absent a showing of criticality.

Therefore, the invention of claim 9 would have been obvious to one of ordinary skill in the art at the time the invention was made.

Art Unit: 1773

14. Claims 4-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gneiss et al. (U.S. Patent 4,944,182) in view of May (U.S. Patent 5,427,859).

Gneiss et al. teach all the limitations of claims 4-8 and 10, as outlined above, except for the use of a fluorinated polymer as the plastic material for the coating. However, Gneiss et al. do explicitly recommend that a material possessing an innate ability to avoid deposits be used as the plastic material for the coating. Gneiss et al. also teach that the material to which the plastic coating material is applied may be a ceramic (column 3, lines 18-21).

May teach a fluorinated polymer that has oil and water repellency as well as a resistance to soil (abstract). The fluorinated polymer may be applied to various substrates including porcelain, a ceramic (column 4, lines 25-51).

One of ordinary skill in the art would be motivated to use the fluorinated polymer of May as the plastic material for the coating of Gneiss et al. as a means for further reducing the effect of soiling on the accuracy of the air flow meter.

Regarding the limitations of claims 4, 5, and 10, the stability temperature, surface energy, and decomposition temperature are taken to be physical properties of the material. Since May uses a fluorinated polymer for the coating as is done in the instant application, the coating of May is taken to inherently possess the same material properties as that of the instant invention.

Furthermore, a coating having a surface energy that meets the limitations of claim 5 should also meet the limitations of claim 6.

Art Unit: 1773

Therefore, the inventions of claims 4-8 and 10 would have been obvious to one of ordinary skill in the art at the time the inventions were made.

#### Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (703) 305-0503. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non afterfinal correspondences and (703) 872-9311 for after-final correspondences.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Paul Thibodeau Supervisory Patent Examiner Technology Center 1700

REF

Ramsey Zacharia

May 23, 2001